



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/525,510	03/15/2000	Marcus Peinado	MSFT-0135/147325.1	9494
41505	7590	01/23/2006	EXAMINER BACKER, FIRMIN	
WOODCOCK WASHBURN LLP (MICROSOFT CORPORATION) ONE LIBERTY PLACE - 46TH FLOOR PHILADELPHIA, PA 19103			ART UNIT 3621	
DATE MAILED: 01/23/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/525,510	PEINADO ET AL.	
	Examiner	Art Unit	
	FIRMN BACKER	3621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9,11-14,17-32,34-37 and 40-46 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9,11-14,17-32,34-37 and 40-46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is in response to an amendment filed December 28th, 2005.
2. Claims 1, 17, 24 and 40 have been amended
3. Claim 16 and 39 have been canceled
4. No claim has been added.
5. Claims 1-9, 11-14, 17-32, 34-37 and 40-46 remain pending.

Response to Arguments

6. Applicant's arguments with respect to claims 1-9, 11-14, 17-32, 34-37 and 40-46 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-9, 11-14, 17-32, 34-37 and 40-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Minear et al (U.S. Patent No. 5,983,350) in view of Holden et al (U.S. PG Pub No. 2005/0010766 A1)

9. As per claims 1 and 24, Minear et al teach a method/computer readable medium for releasing digital content to a rendering application the rendering application for forwarding the digital content to an ultimate destination by way of a path there between, the path being defined by at least one module, the digital content initially being in an encrypted form comprising decrypting the encrypted digital content if in fact each such defining module is to be trusted and forwarding the decrypted digital content to the rendering application for further forwarding to the ultimate destination by way of the authenticated path (*see column 2 lines 52-4 line 11, 4 lines 37 47, 5 lines 34-6 line 2*). Minear et al fail to teach or suggest performing an authentication of at least a portion of the path determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through, traversing the at least a portion of the path to develop a map of each module in the path; and authenticating each module in the map and receiving from the module a certificate as issued by a certifying authority; and determining from the received certificate whether such received certificate is acceptable for purposes of authenticating the module. However, Holden et al teach a system for performing an authentication of at least a portion of the path determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through, traversing the at least a portion of the path to develop a map of each module in the path; and authenticating each module in the map and receiving from the module a certificate as issued by a certifying authority; and determining from the received certificate whether such received certificate is acceptable for purposes of authenticating the module (*see fig 1, 2, paragraphs 0033, 0047, 0089, 0095, 0182, 0196, 0210*). Therefore, it would have been obvious to one of ordinary skill in the art

Art Unit: 3621

at the time the invention was made to modify the Minear et al's system to include Holden et al's system for performing an authentication of at least a portion of the path determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through, traversing the at least a portion of the path to develop a map of each module in the path; and authenticating each module in the map and receiving from the module a certificate as issued by a certifying authority; and determining from the received certificate whether such received certificate is acceptable for purposes of authenticating the module because this would have ensure communication among computer systems in an insecure network readily occurs in an authenticated manner. Further, the signed object exchange utilizes available resources in an innovative and straightforward manner, while achieving communication techniques that are resistant to replay attacks and exportable.

10. As per claims 2 and 25, Minear et al teach a method/computer readable medium further comprising scrambling the digital content upon such digital content being outputted from the rendering application to the path such that the scrambled digital content enters the user mode portion of the path, such scrambled digital content then passing through the modules that define the user mode portion of the path and transiting from the user mode portion to the kernel portion of the path; and de-scrambling the scrambled digital content upon such scrambled digital content transiting from the user mode portion to the kernel portion (*see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20*).

Art Unit: 3621

11. As per claims 3 and 26, Minear et al teach a method/computer readable medium comprising de-scrambling the scrambled digital content by way of a de-scrambling module (*see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20*).

12. As per claims 4 and 27, Minear et al teach a method/computer readable medium comprising de-scrambling the scrambled digital content in the kernel portion of the path (*see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20*).

13. As per claims 5 and 28, Minear et al teach a method/computer readable medium comprising performing an authentication of at least a portion of the kernel portion of the path to determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through (*see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20*).

14. As per claims 6 and 29, Minear et al teach a method/computer readable medium wherein the path includes a user mode portion and a kernel portion, the method comprising performing an authentication of at least a portion of the kernel portion of the path to determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through (*see column 2 lines 52-4 line 3, 4 lines 37-47, 5 lines 34-6 line 20*).

15. As per claims 7 and 30, Minear et al teach a method/computer readable medium further comprising scrambling the digital content upon such digital content being outputted from the

Art Unit: 3621

rendering application to the path such that the scrambled digital content enters the user mode portion of the path, such scrambled digital content then passing through the modules that define the user mode portion of the path and transiting from the user mode portion to the kernel portion of the path; and de-scrambling the scrambled digital content upon such scrambled digital content transiting from the user mode portion to the kernel portion (*see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20*).

16. As per claims 8 and 31, Minear et al teach a method/computer readable medium comprising de-scrambling the scrambled digital content by way of a de-scrambling module (*see column 2 lines 52-4 line 11, 4 lines 3-47, 5 lines 34-6 line 20*).

17. As per claims 9 and 32, Minear et al teach a method/computer readable medium comprising de-scrambling the scrambled digital content in the kernel portion of the path (*see column 2 lines 52-4 line 11, 4 lines 3-47, 5 lines 34-6 line 20*).

18. As per claims 11 and 34, Minear et al teach a method/computer readable medium wherein performing the authentication further comprises ignoring each module not in the map (*see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20*) .

19. As per claims 12 and 35, Minear et al teach a method/computer readable medium wherein performing the authentication comprises authenticating an initial module determining all first destination modules that receive data from such initial module authenticating each such first

Art Unit: 3621

destination module, determining all second destination modules that receive data from each 'such first destination module, iteratively repeating the authenticating and determining steps for third, fourth, fifth, etc. destination modules until each module in such at least a portion of the path had been determined and authenticated (*see column 2 lines 52-4 line 11, 4 lines 37-47, 5 lines 34-6 line 20*).

20. As per claims 13 and 36, Minear et al teach a method/computer readable medium wherein authenticating the initial module comprises authenticating a module in the at least a portion of the path that is to receive the digital content before any other module in the at least a portion of the path, whereby the initial module leads to fully determining all other modules that define the at least a portion of the path (*see column 2 Lines 52-4 line 11, 4 lines 37-47, 5 lines 6 line 20*).

21. As per claims 14 and 37, Minear et al teach a method/computer readable medium comprising employing a database device to keep track of all modules determined to be in the at least a portion of the path, whereby already-determined modules in the at least a portion of the path can be recognized (*see column 2 lines 52-4 line 11, 4 Lines 3-47, 5 Lines 34-6 Line 20*).

22. As per claims 17 and 40, Minear et al teach a method/computer readable medium further comprising receiving the revocation list from a certifying authority; storing the received revocation list in a secure location (*see column 2 lines 52-4 line 11, 4 lines 3-47, 5 lines 34-6 line 20*).

23. As per claims 18 and 41, Minear et al teach a method/computer readable medium wherein performing an authentication further comprises refusing to decrypt the encrypted digital content if at least one module in the at least a portion of the path fails to provide an acceptable certificate (*see column 2 lines 52-4 line 11, 4 lines 3-47, 5 lines 34-6 line 20*).

24. As per claims 19 and 42, Minear et al teach a method/computer readable medium wherein performing an authentication further comprises decrypting the encrypted digital content if all the modules in the at least a portion of the path provide an acceptable certificate (*see column 2 lines 52-4 line 11, 4 lines 3-47, 5 lines 34-6 line 20*).

25. As per claims 20 and 43, Minear et al teach a method/computer readable medium wherein performing an authentication further comprises, for each module in the at least a portion of the path that fails to provide an acceptable certificate defining a sub-portion of the path including the non-providing module, scrambling the digital content upon such digital content entering the tunnel portion of the path such scrambled digital content then passing through the modules that define the sub-portion of the path; and de-scrambling the scrambled digital content upon such scrambled digital content exiting from the sub-portion of the path; and declaring the sub-portion trustworthy (*see column 2 lines 52-4 line 11, 4 lines 3-47, 5 lines 34-6 line 20*).

26. As per claims 21 and 44, Minear et al teach a method/computer readable medium wherein the path includes a user mode portion and a kernel portion, the method comprising

Art Unit: 3621

performing an authentication of the user mode portion of the path and of the kernel portion of the path to determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through (*see column 2 lines 52-4 line 11, 4 lines 3-47, 5 lines 34-6 line 20*).

27. As per claims 22 and 45, Minear et al teach a method/computer readable medium wherein the path includes a tunneled portion, the method further comprising scrambling the digital content upon such digital content entering the tunneled portion of the path, such scrambled digital content then passing through the modules that define the tunneled portion of the path; and de-scrambling the scrambled digital content upon such scrambled digital content exiting from the tunneled portion of the path, and wherein performing an authentication comprises performing an authentication of at least a portion of the path external to the tunneled portion of the path to determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through, an authentication of the tunneled portion being unnecessary (*see column 2 lines 52-4 line 11, 4 lines 3-47, 5 lines 34-6 line 20*).

28. As per claims 23 and 46, Minear et al teach a method/computer readable medium wherein the path includes a user mode portion, a kernel portion, and a tunneled portion in the user mode portion, the method further comprising scrambling the digital content upon such digital content entering the tunneled portion of the user mode portion of the path, such scrambled digital content then passing through the modules that define the tunneled portion of the user mode portion of the path, and de-scrambling the scrambled digital content upon such scrambled

Art Unit: 3621

digital content exiting from the tunneled portion of the user mode portion of the path and wherein performing an authentication comprises performing an authentication of at least a portion of the path external to the tunneled portion of the user mode portion of the path to determine whether each defining module thereof is to be trusted to appropriately handle the digital content passing there through, an authentication of the tunneled portion being unnecessary (*see column 2 lines 52-4 line 11, 4 lines 3-47, 5 lines 34-6 line 20*).

Conclusion

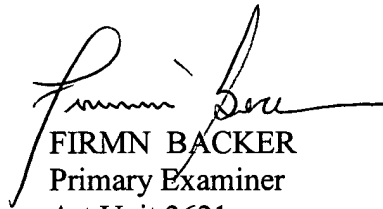
29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (*see form 892*).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FIRMN BACKER whose telephone number is 571-272-6703. The examiner can normally be reached on Monday - Thursday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



FIRMN BACKER
Primary Examiner
Art Unit 3621

January 17, 2006